

ADOLESCENT GOALS AND THEIR REPORTS OF WHAT THEY DO TO ACHIEVE

THOSE GOALS

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Twenty-five adolescents' ranking of a set of equally highly valued goals on a Paired-comparisons Survey was compared with what adolescents say they are doing to achieve those goals. Results of the Paired-comparisons Survey showed that adolescents ranked career, interpersonal, and educational goals rather high and reputation and self-presentation goals rather low. Results analyzed with a contingency coefficient and biserial correlation indicated that not all number one ranked goals had the same value for a particular adolescent, and that number one ranked goals were correlated with verbal reports of concrete actions directed at achieving those goals.

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## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS .....	iii
LIST OF TABLES.....	1
LIST OF FIGURES .....	1
INTRODUCTION .....	3
METHOD .....	8
1. SUBJECTS AND SETTING.....	8
2. MATERIALS.....	8
3. MEASUREMENTS AND ANALYSIS .....	9
4. PROCEDURES.....	13
RESULTS .....	14
DISCUSSION.....	18
FIGURES AND TABLES.....	22
APPENDIX A.....	40
APPENDIX B.....	43
APPENDIX C.....	47
REFERENCES .....	53

## LIST OF TABLES

Table	Page
1. Contingency coefficient .....	31
2. Data for contingency coefficient .....	31
3. Biserial Correlations .....	31

## LIST OF FIGURES

Figure	Page
1. Youths' ranking (converted ranking) of the #1 ranked goal for reputation goals....	23
2. Youths' ranking (converted ranking) of the #1 ranked goal for educational goals...	24
3. Youths' ranking (converted ranking) of the #1 ranked goal for career goals.....	25
4. Youths' ranking (converted ranking) of the #1 ranked goal for interpersonal goals.	26
5. Youths' ranking (converted ranking) of the #1 ranked goal for physical goals.....	27
6. Youths' ranking (converted ranking) of the #1 ranked goal for freedom-autonomy goals.....	28
7. Youths' ranking (converted ranking) of the #1 ranked goal for self-presentation goals.....	29
8. Goal ranking of each goal category.....	30
9. Number of youths' verbal descriptions of effort to achieve the goal possessing the highest quantitative value classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	32
10. Number of youths' verbal descriptions of effort to achieve the goal possessing the 2 <sup>nd</sup> highest quantitative value classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	33

11. Number of youths' verbal descriptions of effort to achieve the goal possessing the 3 <sup>rd</sup> highest quantitative classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	34
12 Number of youths' verbal descriptions of effort to achieve the goal possessing the 4 <sup>th</sup> highest quantitative classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	35
13. Number of youths' verbal descriptions of effort to achieve the goal possessing the 5th highest quantitative value classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	36
14. Number of youths' verbal descriptions of effort to achieve the goal possessing the 6th highest quantitative value classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	37
15. Number of youths' verbal descriptions of effort to achieve the goal possessing the lowest quantitative value classified as a concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action.....	38
16. Sample of 10 verbal descriptions of #1 ranked goals for each goal category.....	39

## **Introduction**

According to some theorists, human behavior is often goal directed (Ford, 1992; Lewin, 1952; Locke, 1991). Most educators and developmentalists believe that adolescence is decisive to goal formation (Carroll, Durkin, Hattie, Houghton, 1997). For example, Carroll, et al., said “Important processes of identity formation, decisions about educational opportunities, the consolidation of developing social values, and the construction of plans for one’s future are all very salient during this phase of life, and directions taken here have long-term implications” (1997, p. 441).

Longitudinal and cross-sectional studies report that adolescents attach much importance to finishing their education (Nurmi, 1987, 1989a, 1989b, 1991b; Salmela-Aro-et. al, 1991). In addition to educational goals, contemplating and planning toward a career (Langan-Fox, 1991a, 1991b; Nicholls, 1989; Nurmi, 1991a, 1991b), interpersonal relations (Berndt, 1979; Durkin, 1995; Goldsmith, Throfast, & Nilsson, 1989; Heaven, 1994; Nurmi, 1991a; Salmela-Aro, Nurmi & Pulliainen, 1991; Wentzel, 1989; Wentzel, 1994), personal autonomy (freedom-autonomy goals) (Berndt, 1979; Ford, 1992; Goudas, Biddle & Fox, 1994; Nurmi, & Pullianen, 1991; Steinberg & Silverberg, 1986), self-presentation (Elliott, Huizinga, & Menard, 1988; Emler, Reicher, & Ross, 1987; Loeber & Dishion, 1983), reputation (Emler, 1990; Emler & Reicher, 1995; Hopkins & Emler, 1990), and physical goals (Duda, 1989; Duda, Fox, Biddle, & Armstrong, 1992; Duda & Nicholls, 1992; Goudas et al., 1994; Sarrazine et al., 1996) are prominent for adolescents.

Research has also indicated that illegal activities can function as goals for adolescents (Carroll, 1995; Emler, 1984; Goldsmith et al., 1989; Hopkins, Emler, 1990).



Delinquent youth perceive delinquent behavior as self-presentation comprised of defiance, defiance that is expressed to and reinforced by delinquent peers (Blackburn, 1993; Emler, 1983, 1984).

Informed by these studies, Carroll, et al. (1997) sought to identify goals for normal, at-risk, and delinquent youth, and assessed whether these groups differed in terms of the importance they attached to these goals. They produced a temporary pool of 75 goals. Each goal fell within one of eight categories: physical achievement, reputation, self-presentation, freedom of autonomy, delinquency, interpersonal, career, and educational. The item pool was evaluated by 12 independent raters comprising the juvenile justice bureau personnel, teachers, psychologists, incarcerated youth, high school students, university researchers, postgraduate students, and parents. As a result of this exercise, 51 items were included in a draft of the Importance of Goals Scale. The experimenters administered the draft of the Importance of Goals Scale to 230 high school students and analyzed the responses with an exploratory factor analysis (i.e. SPSS-X, 1986) and then assessed scale and subscale reliability by calculating a Cronbach's alpha (Cronbach, 1951). Each student was instructed to select the response that best described the importance he or she attached to each goal. The response layout was a three-point scale, with each point on the scale worded "not important", "sometimes important", or "very important". The results of the factor analysis showed eight factors (reputation, educational, career, interpersonal, physical, freedom-autonomy, self-presentation, and delinquency). The results of the Cronbach's alpha showed goals with acceptable internal consistencies ranging from .60 to .84. The goals could be reliably grouped into one of the eight categories. The factor names were then given to the

aforementioned 12 independent raters who suggested the most suitable category for each goal. Interrater agreement was 76%. Eight goals were removed because interrater reliability for these goals was less than 65%.

The goal scale was administered to 260 adolescent boys (80 delinquent, 90 at risk, and 90 normal) to evaluate whether the Importance of Goals Scale could be used across different data sets and to determine if the scale could examine whether these groups differed in terms of the importance they attached to goals. Factor structure and content validity were evaluated by calculating a maximum likelihood exploratory factor analysis with SPSS-X statistical package (SPSS-X, 1986). The results of the aforementioned factor analysis conducted on the responses of the 230 high school students were cross validated with the item responses of the 260 adolescents with the maximum-likelihood confirmatory factor analysis program (Krakowski and Hattie, 1993). The factor structure was found to be replicable and validated across different samples: Internal consistencies ranged from .62 to .84. A coefficient of congruence procedure (e.g. Burt, 1948) was conducted to evaluate the similarity between the factor loadings of the 230 high school students and the factor loadings of the 260 adolescents. The congruence coefficients were all greater than .91 suggesting that the Importance of Goals Scale could be used across different goal sets. The item responses of these 260 adolescents also indicated group differences in importance attached to goals: Delinquent and at-risk adolescents attached more importance to delinquency and freedom-autonomy goals. Not at-risk adolescents attached more importance to educational and interpersonal goals.

Goal-setting is also an integral feature of behavioral intervention programs because, while the therapist influences the selection of target behavior(s), it is the client who decides on the objectives of therapy (O’leary, Wilson, 1975). Research suggests that the outcome of therapy is positively correlated to the social context of goal setting. For example, Hayes, Rosenfarb, Wulfert, Munt, Korn, and Zettle, (1985) compared the effects of self-reinforcement on studying behavior when studying related goals were made public and private. In experiment 1, self-reinforcement procedures did not increase the studying behavior of 26 college students when goals were made private. However, self-reinforcement procedures did increase studying behavior when goals were made public. In experiment two, goal-setting increased the studying behaviors of 21 college students with studying difficulties only when goals were made public.

Since Knowledge of what goals are more important is often necessary during counseling and therapy, a tool that can provide a quantitative measure of importance attached to each goal is necessary. Although, the item responses “not important”, “sometimes important”, and “very important” will indicate whether a goal is a formed goal and allow for an assessment of importance attached to types of goals (e.g. reputation, educational, career, interpersonal, physical, freedom-autonomy, self-presentation, delinquency), these item responses do not allow for an assessment of the relative importance of two or more highly valued goals. A promising tool to assess the importance of goals is Paired-comparisons. The technique involves pairing two stimuli and asking the subject to choose between the two. Each stimulus is paired with each of the relevant stimuli. The percentage of time the stimulus is selected provides a quantitative value of stimulus preference (i.e. importance attached to a goal).

The technique has been used successfully to judge bar lengths (e.g. Koczkodaj, 1996), and to identify gender differences with respect to preferred reinforcers for 2<sup>nd</sup>, 4<sup>th</sup>, and 6<sup>th</sup> graders (Pruitt, Farrell, & Erickson, 1987).

Besides the identification of goals either through the Importance of Goals Scale or paired-comparisons procedures, it is also important to determine if people do anything to achieve goals they claim are important. The correspondence between verbal and nonverbal behavior was once presumed (Bem, 1967; Lovaas, 1961; & O'leary, 1968). However, research has shown that this is not always the case. Often, special procedures are needed to achieve say-do correspondence (Israel & Brown, 1977; Israel & O'leary, 1973; Karoly & Dirks, 1977; Risley & Hart, 1968; & Rogers-Warran & Baer, 1976).

Indeed, formed goals and their correspondence to behavioral effort to achieve these formed goals would validate the legitimacy of goals. Unfortunately, practical concerns sometimes limit directly observing goal-related behaviors. Nonetheless, a step toward establishing the legitimacy of goals is to assess the correspondence between formed goals and verbal descriptions of effort to achieve these goals.

Because goal setting appears crucial to adolescent development and given that a say-do correspondence cannot be presumed, this study will examine whether adolescents' ranking of goals in a paired-comparisons procedure correlate with verbal descriptions of what they are doing to achieve these goals.

## **Method**

### Subjects and Setting

The participants were 25 adolescents, 13 girls and 12 boys, between 13-18 years of age. They were recruited from a church in a lower/middle income area in Austin Texas. The study was carried out in the Sunday school room of the church. Appendix A contains the recruitment letter and the informed consent letter.

### Materials

Three questionnaires were used in this experiment: 1) Importance of Goals Scale; 2) Paired-comparisons Survey; and 3) a Say-Say Correspondence Survey.

The Importance of Goals Scale included an instruction sheet (see appendix B) and a listing of 38 of the 43 goals found in Carroll et al. (1997). One of the 43 goals was excluded because the language describing the goals appeared unsuitable for the participants (e.g. to do a course at tertiary and further education). Also, the four delinquency goals were excluded because of the potential for dishonest responses. Goals were arranged into seven categories (reputation goals, educational goals, career goals, physical goals, interpersonal goals, freedom-autonomy goals, and self-presentation goals.) To the right of each goal, the questionnaire contained the words “yes” and “no”; here the youth would circle whether the goal was a goal for him or her. To the right of each “yes” and “no”, the questionnaire contained an ascending sequence of numbers that was equal to the total number of goals belonging to the associated goal category; here the youth had to circle a number to indicate the within category ranking of that goal. Goals

could not have the same ranking. Appendix B contains a copy of the Importance of Goals Scale.

The Paired-comparisons Survey included the instruction, “For each pair of goals, circle or mark an X through the goal you would most like to achieve”. Below the instruction, the questionnaire contained a list of all #1 ranked goals paired with each other twice. The youth had to circle or mark an X through the goal he or she would most like to achieve. Appendix C contains a copy of the Paired-comparisons Survey.

The Say-Say Correspondence Survey included the instruction, “In the following spaces, describe what, if anything, you are doing to achieve the following goals”. Below the instruction, the goal questionnaire contained a list of questions worded “What are you doing to....” For example, “What are you doing to be a good student”? Questions were separated by several spaces to allow for a response. Appendix C contains a copy of the Say-Say Correspondence Survey.

### Measurements and Analysis

Several measures were taken: The Importance of Goals Scale identified goals and rank ordered each in terms of importance. The Paired-comparisons Survey ranked each #1 ranked goal. The Say-Say Correspondence Survey provided verbal descriptions of what the youth were doing to achieve their #1 ranked goals. The contingency coefficient assessed the relationship between goal value and effort. For each goal category, the biserial correlation assessed the relationship between goal value and effort.

Importance of Goals Scale. Youth circled “yes” or “no” to whether each goal was a goal for him or her. For each goal identified as a formed goal, the scale instructed the youth to rank these goals in terms of importance within their respective categories.

For example, if a boy identifies “to be a good student”, “to pass my exams”, and “to get better marks than my friends” as goals within the educational category, he would rank these goals. If he considers, “to be a good student” a more important goal than “to get better marks than my friends” and “to pass my exams”, he would circle the #1 next to “to be a good student”. Circling #1 means that “to be a good student” is the most important goal for him in the educational goal category. If “to pass my exams” is a more important goal for him than “to get better marks than my friends”, he would circle #2 next to “to pass my exams”. Circling #2 means that "to pass my exams" is a more important goal for him than "to get better marks than my friends". Because he considers “to get better marks than my friends” less important than “to be a good student” and “to pass my exams”, he would circle the #3 next to “to get better marks than my friends”.

Paired-comparisons Survey. To quantify the importance attached to each #1 ranked goal, (as determined by the Importance of Goals Scale) these goals were incorporated into the Paired-comparisons Survey. For this study, Paired-comparisons involved pairing the highest-ranking goal from each category with each of the highest-ranking goals from the other goal categories. The percentage of time each goal was selected relative to all other goals provided an indication of goal preference. For example, if “to be a member of the ‘in’ group” was selected six out of the twelve times it was paired with a different goal, then “to be a member of the ‘in’ group” would receive a value of 50%. If “to get a job” was selected three out of the twelve times it was paired with a different goal, then “to get a job” would receive a value of 25%. Values were converted to rankings, the higher the value, the higher the ranking. Goals could have the same ranking.

To rank all goal categories, the number of youth goal values one through four were summed together for each goal category, the greater number of youth goals falling within the values one through four, the higher the ranking of that goal category. This was done because the goal with the 4<sup>th</sup> highest value constituted the middle of the scale. For example, if five subjects ranked career goal highest, seven ranked career goals 2<sup>nd</sup> highest, three ranked career goals 3<sup>rd</sup> highest and eight ranked career goals 4<sup>th</sup> highest, career goals would receive a value of 23. If self-presentation goals received a value of 12, then career goals would be assigned a higher ranking than self-presentation goals.

Say-Say Correspondence Survey. The Say-Say Correspondence Survey was comprised of open-ended questions to what the youth are doing to achieve their formed goals. For example, if “to be a member of the ‘in’ group” was identified as one of the highest-ranking goals from among each potential goal category, this youth would have attempted to describe in writing what he or she is doing to achieve being a member of the “in” group.

The verbal descriptions of formed goals were categorized by the experimenter into one of five categories: concrete action, general behavior, personal attribute, religious attribute, and no action. A concrete action was defined as any behavior(s) that could be easily and objectively described. An example is “filling out applications from stores” in response to “What are you doing to get a job?”. General behavior was defined as behavior that could not be easily and objectively described or related to a specific behavior(s). For example, “working hard” in response to “What are you doing to have a lot of money?” cannot be easily and objectively described or related to a behavior(s). A personal attribute was defined as using verbs without reference to behavior to describe



effort. An example is “assuring that I am a good friend” in response to “What are you doing to have others trust in you?”. A religious attribute was defined as invoking religious terms without reference to behavior to describe effort. An example is “live in Christ and hope others do want to follow in my mission” in response to “What are you doing to help others?”. A no-action was defined as either not responding to the question or admitting doing nothing to achieve the goal.

The verbal descriptions were categorized by the experimenter by first reviewing the verbal descriptions and then defining mutually exclusive categories that would summarize the content of the various verbal descriptions.

A contingency coefficient  $C$  was used to determine the degree of relationship between the evaluation of a goal (i.e., the value) and effort to achieve this goal (concrete action versus no action, personal attribute, religious attribute, and general behavior). The contingency coefficient  $c$  was chosen because it is appropriate for assessing the extent of association or relation between two sets of discrete events (Siegal, 1956). The  $C$  was used because it is suitable when categorical data is the only information pertaining to one or both sets of these attributes (Siegal, 1956). That is, the  $C$  is suitable for analyzing data represented by a random series of frequencies.

For each goal category, a biserial correlation was used to determine the degree of relationship between the converted ranking of a goal and effort to achieve this goal (concrete action versus no action, personal attribute, religious attribute, and general behavior). A biserial correlation was used because it allows for an assessment of the degree of relationship between a continuous and discrete variable (Gravetter, Wallnau, 1985). Thus, the biserial correlation is appropriate for an assessment of the degree of

relationship between a converted goal ranking and whether a youth describes a concrete action.

Interrater agreement. The experimenter and a second observer categorized the verbal descriptions. The second observer was given a printed copy of the behavioral classifications and their definitions. The experimenter provided the second observer with fictitious examples of verbal descriptions for each behavioral classification. Reliability was calculated by dividing the total number of agreements by the total number agreements plus disagreements and multiply by 100. Reliability for categorizing the behavioral classifications was 80%.

### Procedures

The youth minister was verbally instructed on how to administer the questionnaires. He administered the Importance of Goals Scale to all 25 youth. Following the youths' completion of this scale, results were analyzed by the experimenter to determine the composition of the Paired-comparisons Survey and the Say-Say Correspondence Survey. Two weeks later, the youth minister administered the Paired-comparisons Survey and the Say-Say Correspondence Survey to all 25 youth.

## **Results**

Figures 1-7 depicts the results obtained from the Pair and Comparison Survey for each of the #1 ranked goals (value converted to a ranking). Figure 1 shows, the number of subjects and their rank of reputation goals. The majority of youth ranked reputation goals rather low. One selected reputation goals most often, five selected reputation goals third most often, two selected reputation goals 4th most often, seven selected reputation goals 5th most often, and eight selected reputation goals 6<sup>th</sup> most often.

Figure 2 shows the number of subjects and their rank of educational goals. The majority of youth ranked educational goals rather high. Eight selected educational goals most often, eight selected educational goals 2<sup>nd</sup> most often, four selected educational goals 3<sup>rd</sup> most often, two selected educational goals 4<sup>th</sup> most often, one selected educational goals 5<sup>th</sup> most often, and two selected educational goals 7<sup>th</sup> most often.

Figure 3 shows the number of subjects and their rank of career goals. The majority of youth ranked career goals somewhat evenly across goal rankings one through five. Five selected career goals most often, six selected career goals 2<sup>nd</sup> most often, four selected career goals 3rd most often, eight selected career goals 4<sup>th</sup> most often, and two selected career goals 5<sup>th</sup> most often.

Figure 4 shows the number of subjects and their rank of interpersonal goals. The majority of youth ranked interpersonal goals rather high. Eleven selected interpersonal goals most often, eight selected interpersonal goals 2<sup>nd</sup> most often, two selected interpersonal goals 3<sup>rd</sup> most often, two selected interpersonal goals 4<sup>th</sup> most often, and two selected interpersonal goals 5<sup>th</sup> most often.

Figure 5 shows the number of subjects and their rank of physical goals. The youth ranked physical goals fairly evenly across goal rankings one through six. Two selected physical goals most often, two selected physical goals 2<sup>nd</sup> most often, seven selected physical goals 3<sup>rd</sup> most often, five selected physical goals 4<sup>th</sup> most often, four selected physical goals 5<sup>th</sup> most often, and four selected physical goals 6<sup>th</sup> most often.

Figure 6 shows the number of subjects and their rank of freedom-autonomy goals. The youth ranked freedom-autonomy goals fairly evenly across goal rankings one through seven. Five selected freedom-autonomy goals most often, four selected freedom-autonomy goals 2<sup>nd</sup> most often, four selected physical goals 3<sup>rd</sup> most often, five selected freedom-autonomy goals 4<sup>th</sup> most often, four selected freedom-autonomy goals 5<sup>th</sup> most often, two selected freedom-autonomy goals 6<sup>th</sup> most often, and one selected freedom-autonomy goals 7<sup>th</sup> most often.

Figure 7 shows the number of subjects and their rank of self-presentation goals. The majority of youth ranked self-presentation goals rather low. One selected self-presentation goals 2<sup>nd</sup> most often, four selected self-presentation goals 3<sup>rd</sup> most often, one selected self-presentation goals 4<sup>th</sup> most often, four selected self-presentation goals 5<sup>th</sup> most often, two selected self-presentation goals 6<sup>th</sup> most often, and six selected self-presentation goals 7<sup>th</sup> most often.

Figure 8 shows the ranking of each goal category. Youth ranked interpersonal and career goals highest, followed in this order, educational, freedom-autonomy, physical, reputation, and self-presentation goals.

As Table 1 shows, the **C** indicating the degree of relationship between the value of a goal and verbal reports of effort to achieve this goal is .35. This **C** indicates that

12.25% of the variance in reports of effort to achieve a goal is attributed to the variance in the value of that goal.

As Table 2 shows, the biserial correlation for the degree of relationship between the converted ranking of a goal and reports of effort to achieve this goal is .37 for interpersonal goals, .31 for career goals, .25 for freedom-autonomy goals, .24 for physical goals, .12 for reputation goals, .09 for educational goals, and .07 for self-presentation goals. The biserial correlations for interpersonal (.37), career (.31), freedom-autonomy (.25), and physical (.24), indicate a moderate correlation between the converted ranking of a goal and reports of effort achieve this goal.

Figures 9-15 depict the number of youths' verbal descriptions (i.e., concrete action, a general behavior, a personal attribute, a religious attribute, or a no-action for the highest to the lowest goal value). A number of youth had two or more goal categories with the same value and different behavioral classifications, hence, why some youths' data are not represented.

Figure 9 shows the results for the goals with the highest value. The majority of youth described a concrete action for this goal. Eighteen described a concrete action, three a general behavior, one a personal attribute, and two a non-action (n=24).

Figure 10 shows the results for the goals with the 2<sup>nd</sup> highest value. The majority of youth described a concrete action for this goal. Eighteen described a concrete action, two a general behavior, two a personal attribute, one a religious attribute, and one a no-action (n=24).

Figure 11 shows the results for the goals with the 3<sup>rd</sup> highest value. A slight majority of youth described a concrete action for this goal. Fourteen described a concrete

action, one a general behavior, two a personal attribute, one a religious attribute, and one a no-action (n=19).

Figure 12 shows the results for the goals with the 4<sup>th</sup> highest value. A slight majority of youth described a concrete action for this goal. Thirteen described a concrete action, one a general behavior, five a personal attribute, and five a no-action (n=24).

Figure 13 shows the results for the goals with the 5<sup>th</sup> highest value. Almost half of the youth described a concrete action for this goal. Twelve described a concrete action, six a personal attribute, and four a no-action (n=24).

Figure 14 shows the results for the goals with the 6<sup>th</sup> highest value. A small minority of youth described a concrete action for this goal. Five described a concrete action, one a general behavior, five a personal attribute, and five a no-action (n=16).

Figure 15 shows the results for the goals with the lowest value. A minority of youth of the youth described a concrete action for this goal. Nine described a concrete action, one a general behavior, one a personal attribute, and thirteen a no-action (n=24). A sample of ten verbal descriptions of #1 ranked goals for each goal category is seen in figure 16.

## **Discussion**

The results of the Paired-comparisons Survey show that youth ranked interpersonal and career goals highest, followed by educational, freedom-autonomy, physical, reputation, and self-presentation goals. The results of the Paired-comparisons Survey and the Say-Say-Correspondence Survey show that the goal possessing the highest value and the goal possessing the 2<sup>nd</sup> highest value were described with a concrete action most often, followed in order by the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 7<sup>th</sup>, and 6<sup>th</sup>. This almost perfect correlation between the higher the value of a goal and the more likely the youth said that he or she is working on achieving the goal, is supported by the C and biserial correlations for interpersonal, career, physical, and freedom-autonomy goals. These data show that not all #1 ranked goals had the same value.

The results of the Paired-comparisons Survey provide additional data that appear to support results showing that normal youth attach much importance to interpersonal and educational goals (Carroll, et al.,1997). However, because it is uncertain to which adolescent class the youths belong (e.g. normal, at-risk, delinquent), no comparison can be made. However, because the youths were recruited from a church, it is likely they belonged to a normal adolescent class.

The nearly one-to-one correspondence between the higher the value of a goal and the greater the number of youth describing a concrete action for a goal, along with the biserial correlations, suggest that Paired-comparisons is a better predictor of interpersonal, career, physical, and freedom-autonomy goals youth say they are working on achieving than within-category ordinal rankings. In other words, prioritizing

interpersonal, career, physical, and freedom-autonomy goals based on the likelihood of selecting these goals when they are presented in pair wise comparisons is a better predictor of goals youth say they are working on achieving than within-category rankings.

These results suggest that professionals designing a goal-setting program that includes interpersonal, career, physical, and freedom-autonomy goals may benefit from administering a Paired Comparison Survey composed of these goals so that effort is directed at helping youth achieve goals they are most likely to pursue. As previously mentioned, the identification of goals is a first step in designing behavioral intervention programs. Once the goal is identified it might be necessary to establish the control of goal-setting over effort to achieve these goals. The Paired-comparisons technique can only help on the target selection. A limitation of paired-comparisons is the extensive preparation and administration time required to pair and compare many goals. For example, to pair and compare each of the goals listed on Carroll, et al. (1997), it would require assembling a total of 1849 pairs.

The instrument used to obtain paired-comparisons data would have been vastly improved by conducting within-category paired-comparisons. That is, pairing each of the goals twice within a category, and determining the preference rating for each goal within its category. For example, for educational goals, this would involve pairing “to get high grades” and “to get better marks than my friends” twice, pairing “to get high grades” and “to pass my exams” twice and so on until each of the educational goals are paired twice. This modification would allow future researchers the opportunity to assess all 38 goals on the Importance of Goals Scale. The paired-comparisons procedure used during this study



assessed the preference for six or seven goals only. Furthermore, following an administration of the Say-Say Correspondence Survey, the results of paired-comparisons could be compared to the results of both a within-category and a between-category (scale where youth rank order the seven most important of the 38 goals) ordinal ranking scale to determine the better predictor of goals youth say they are working on achieving.

This study suggests that certain adolescent goals may have no relation to what youth say they are doing to achieve these goals. However, the Say-Say Correspondence Survey may only provide partially valuable information because verbal behavior has a weak correspondence with both past and future actions (Ajzen & Fishbein, 1977; Wicker, 1969). Also, the say-say correspondence may be affected by the social desirability bias. Social desirability bias, as discussed by Weiten (1992), is “the tendency to give socially approved answers to questions about oneself” (p. 52). Furthermore, the questions on the Say-Say Correspondence Survey may not have been worded adequately to prompt better descriptions of what the youth were doing in terms of behavior to achieve their goals. It may be that the answers would be improved by asking for answer clarifications.

Directly observing goal related behaviors (or lack there of) would provide conclusive say-do data. However, practical limitations thwart such a task, unless the youth resides in a more restricted environment, such as a juvenile facility. As such, directly observing goal related behaviors may be more likely with at-risk and/or delinquent populations. When direct observation is not possible, response products (e.g. Johnston & Pennypacker, 1993) and/or teacher and parent reports (e.g. Kendall, Flannery, Panichelli, & Southam, 1997; Bauermeister, Bird, Canino, & Rubio, 1996; Deater, & Plomin, 1999) may accurately describe a youth’s behavior. Once direct observation,

response products, and/or reports are possible, a researcher will have the opportunity to intervene and enhance the verbal control of goal related behaviors. For example, if a youth tells his counselor he would like to get a job but direct observation, response products, and/or teacher and parent reports suggest that he is not pursuing this goal, the counselor will learn that an opportunity exists to aid this youth in the job search and application process.

## **Figures & Tables**

FIGURE 1

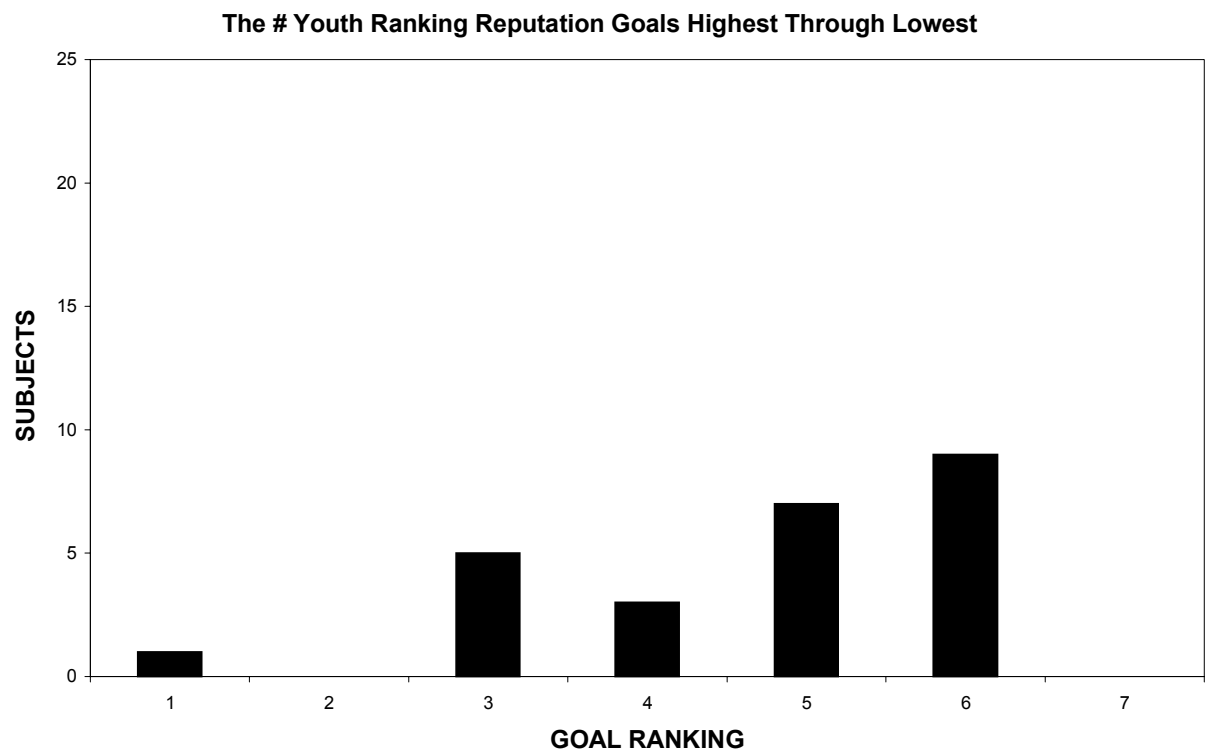


FIGURE 2

The # of Youth Ranking Educational Goals Highest Through Lowest

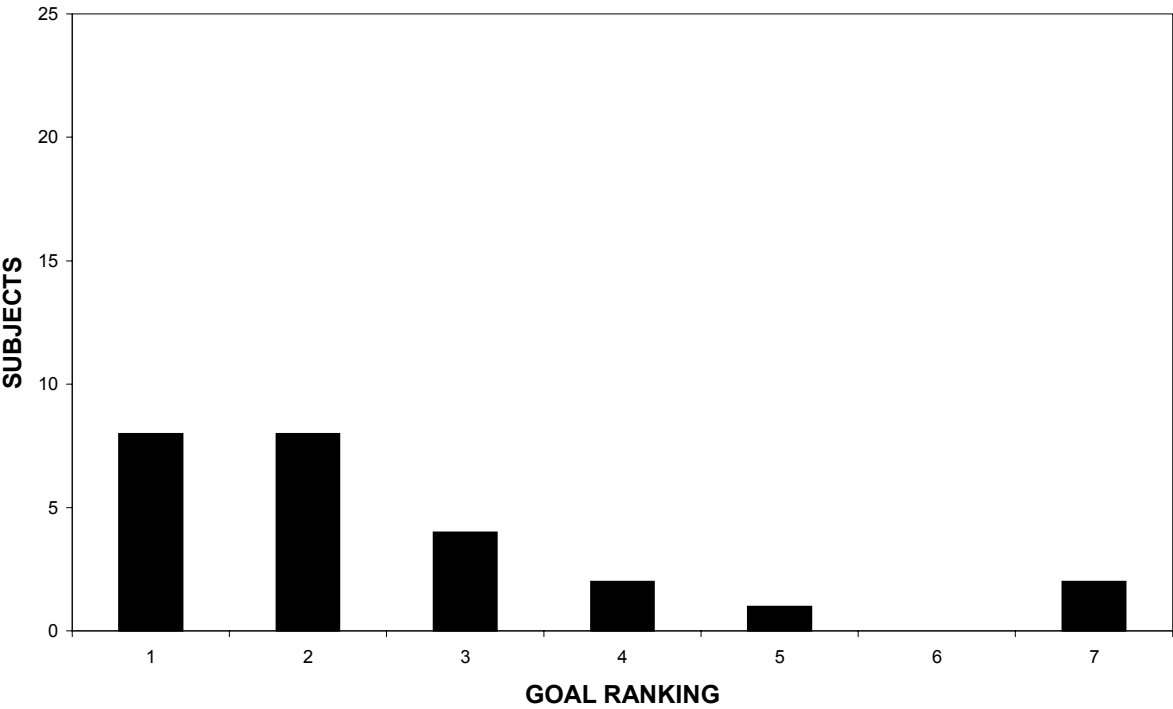
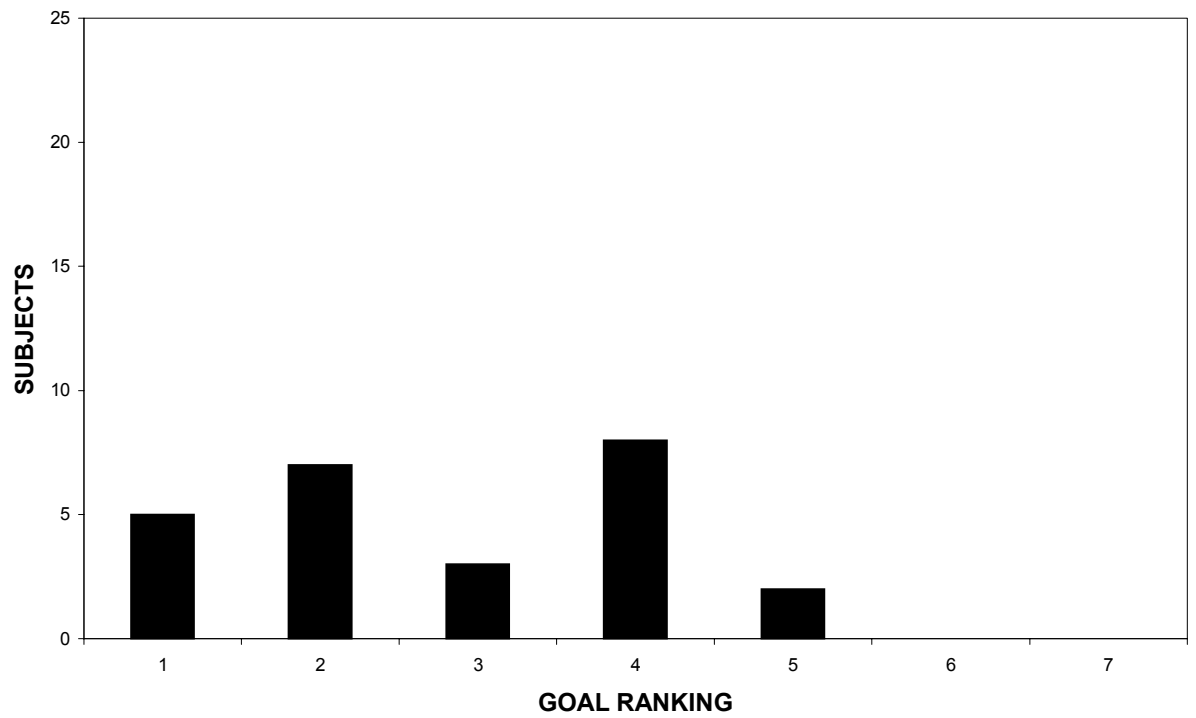


FIGURE 3

**The # of Youth Ranking Career Goals Highest Through Lowest**



**FIGURE 4      The # of Youth Ranking Interpersonal Goals Highest Through Lowest**

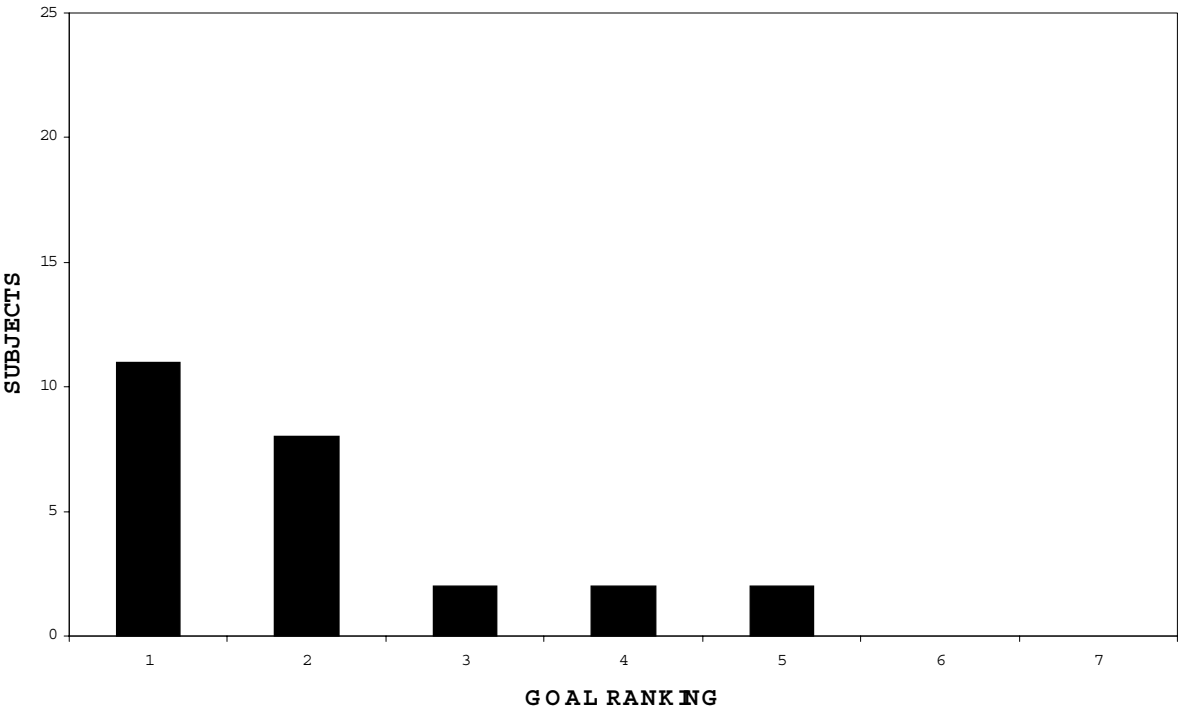
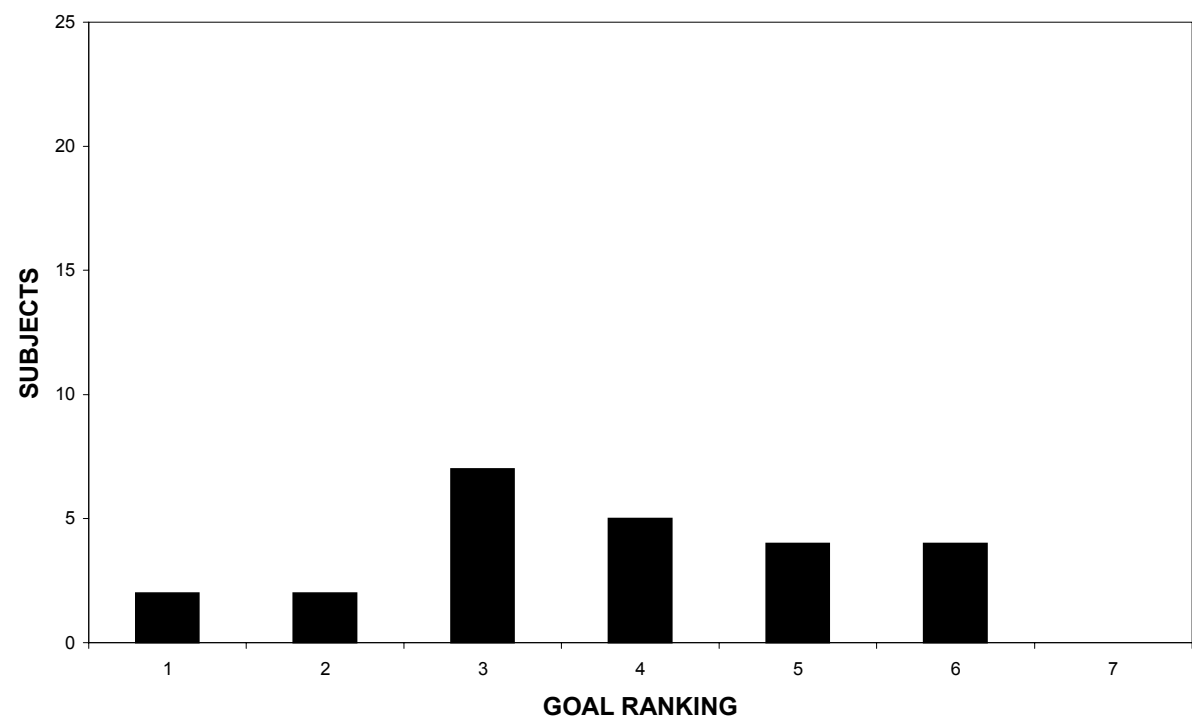


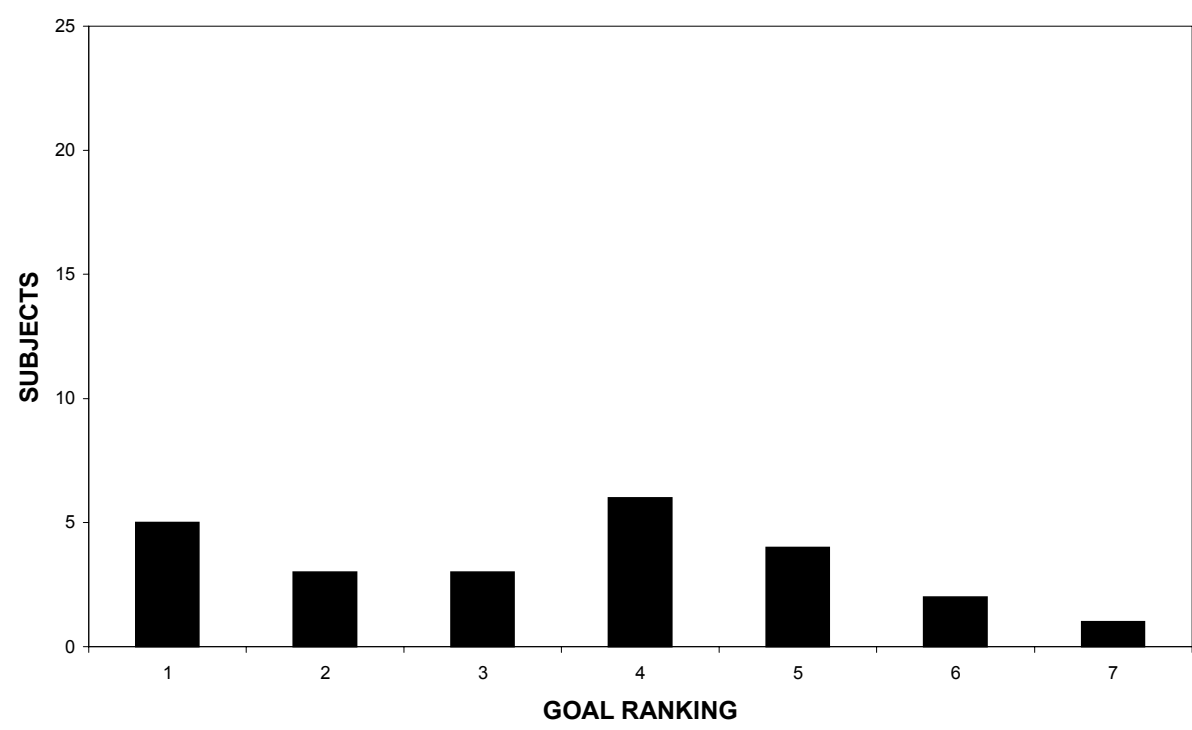
FIGURE 5

The # of Youth Ranking Physical Goals Highest Through Lowest





**FIGURE 6**      **The # of Youth Ranking Freedom-Autonomy Goals Highest Through Lowest**



**FIGURE 7      The # of Youth Ranking Self-Presentation Goals Highest Through Lowest**

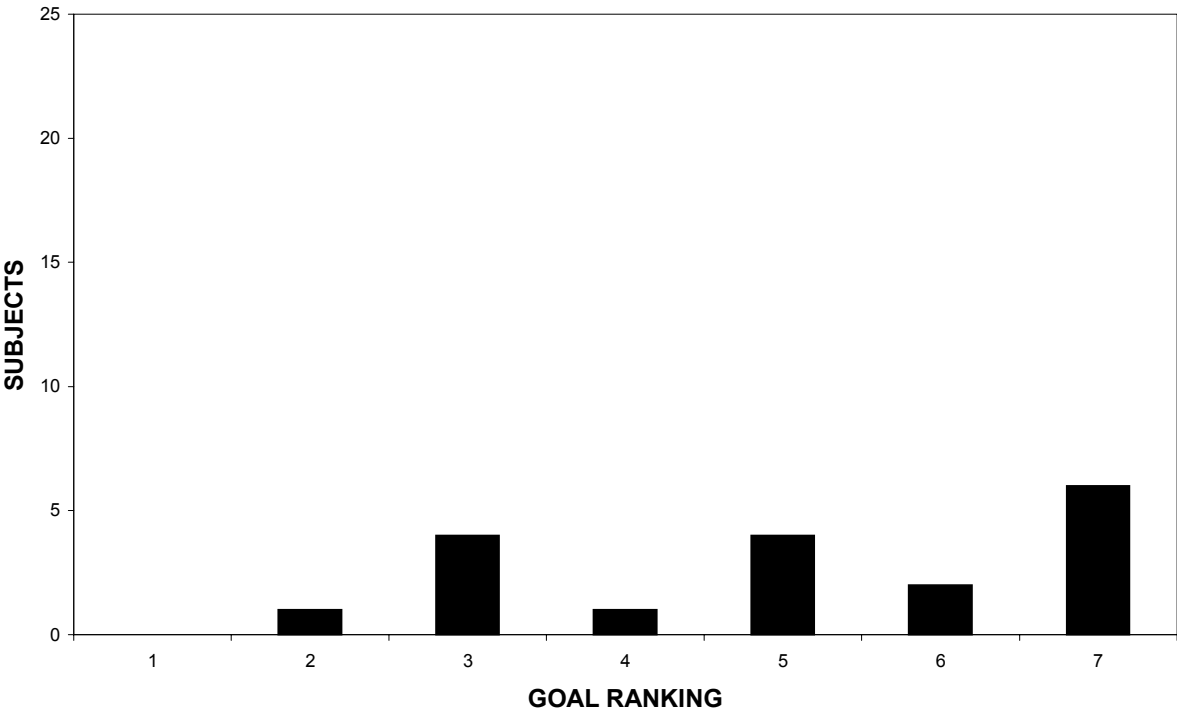


FIGURE 8

GOAL CATEGORY RANKING OF EACH GOAL CATEGORY

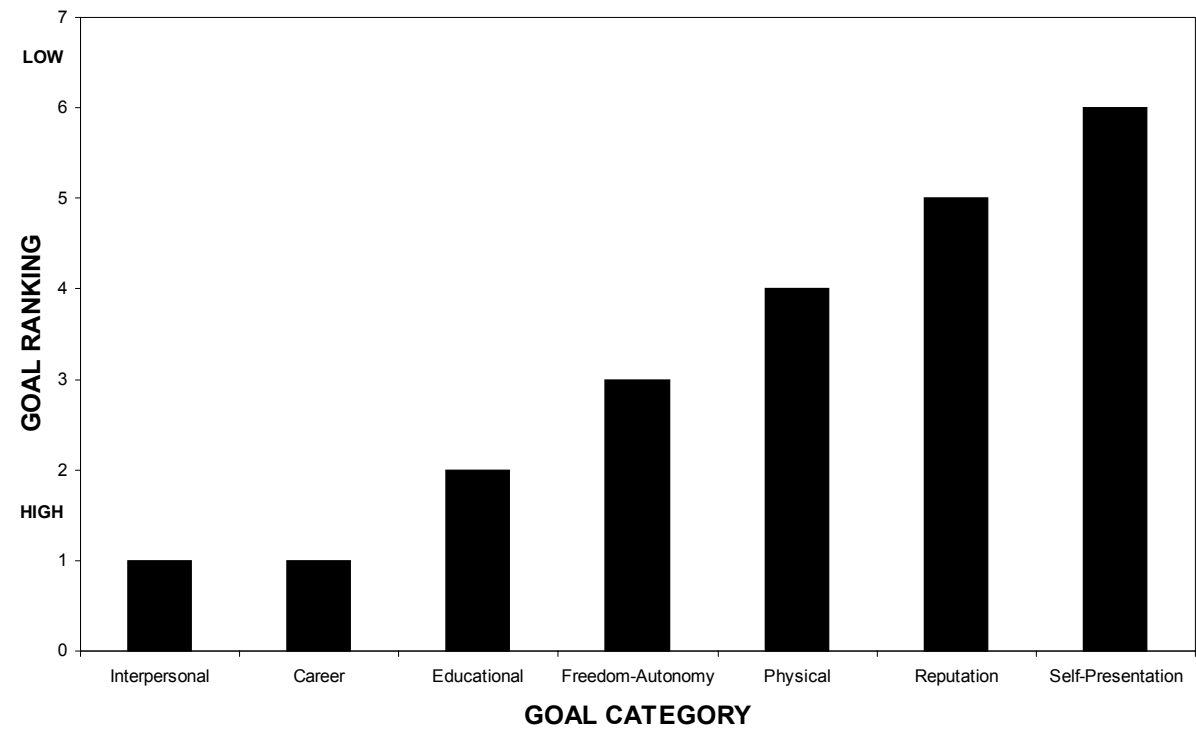


TABLE 1

CONTINGENCY COEFFICIENT
.35

TABLE 2 (Data for Contingency Coefficient)

	CONCRETE ACTION	NO CONCRETE ACTION
GOAL WITH HIGHEST VALUE	18	6
GOAL WITH LOWEST VALUE	9	15

TABLE 3

BISERIAL CORRELATIONS	
INTERPERSONAL GOALS	.37
CAREER GOALS	.31
FREEDOM-AUTONOMY GOALS	.25
PHYSICAL GOALS	.24
REPUTATION GOALS	.12
EDUCATION GOALS	.09
SELF-PRESENTATION GOALS	.07

FIGURE 9

**SAY-SAY CORRESPONDENCE FOR GOAL POSSESSING HIGHEST  
QUANTITATIVE VALUE**

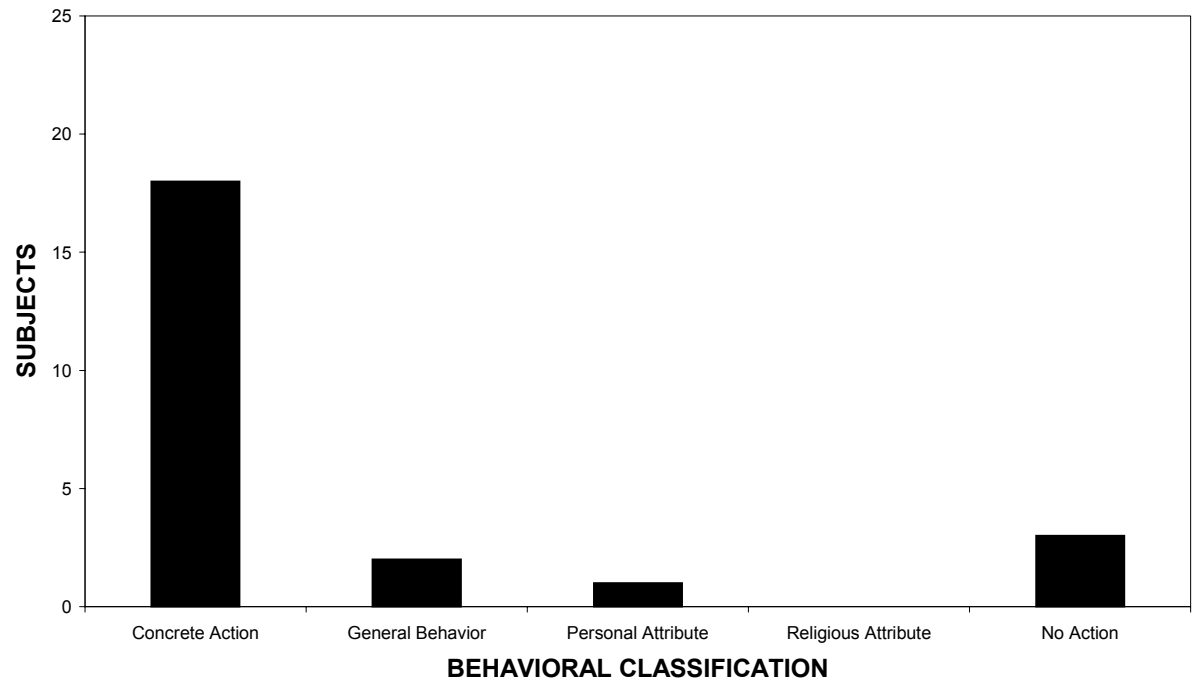


FIGURE 10      **SAY-SAY CORRESPONDENCE FOR GOAL POSSESSING 2ND HIGHEST  
QUANTITATIVE VALUE**

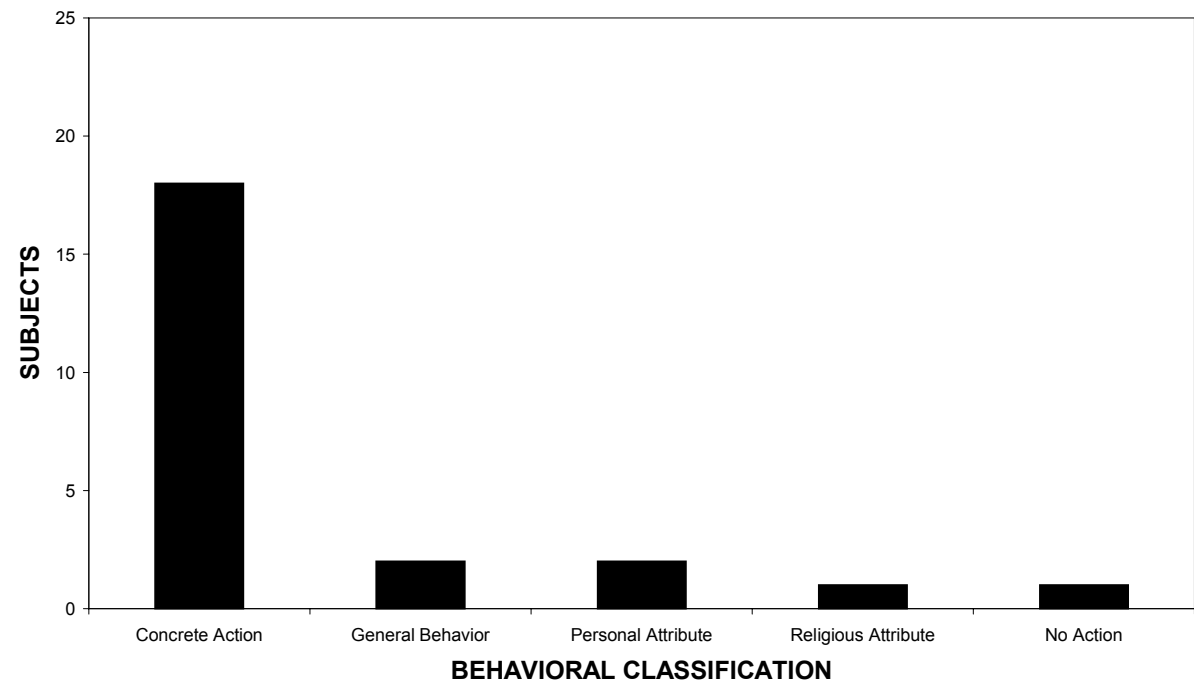


FIGURE 11

**SAY-SAY CORRESPONDENCE FOR GOAL POSSESSING 3RD HIGHEST  
QUANTITATIVE VALUE**

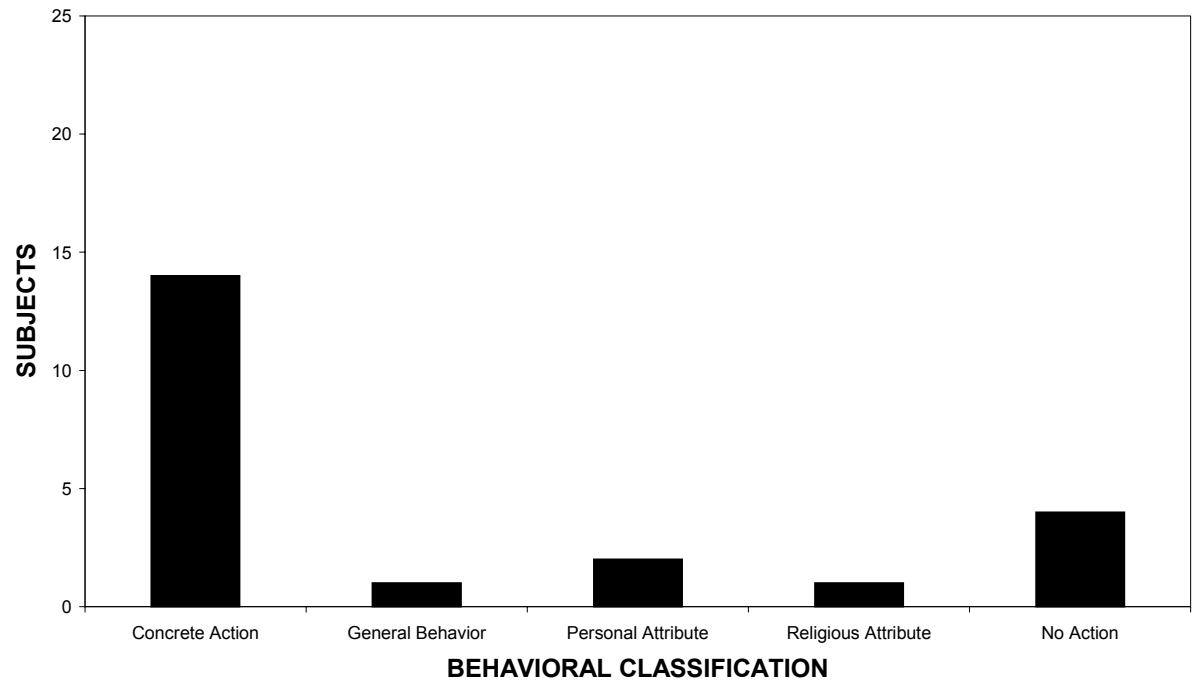


FIGURE 12

**SAY CORRESPONDENCE FOR GOAL POSSESSING 4TH HIGHEST  
QUANTITATIVE VALUE**

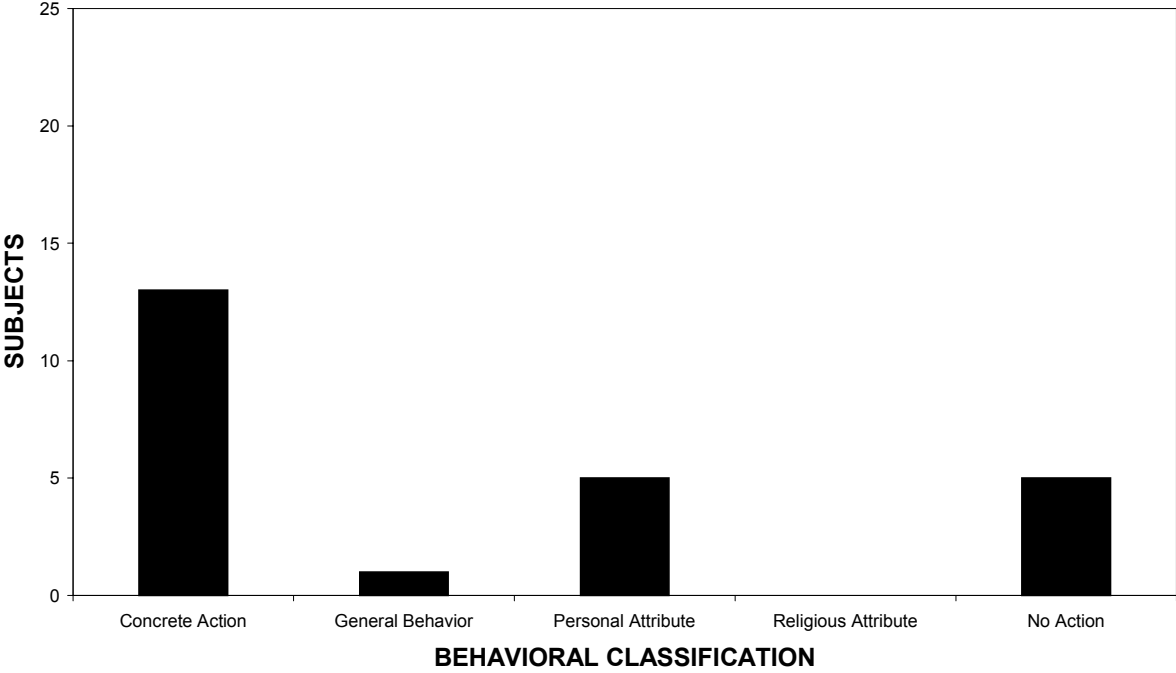




FIGURE 13      **SAY-SAY CORRESPONDENCE FOR GOAL POSSESSING 5TH HIGHEST  
QUANTITATIVE VALUE**

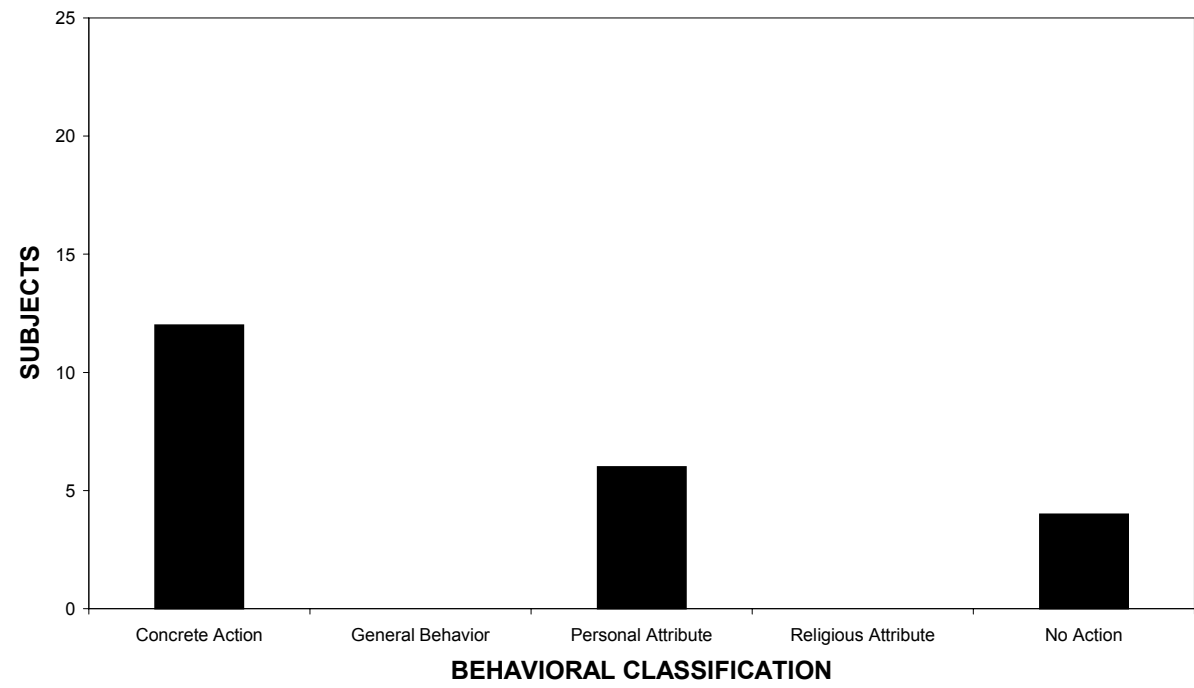


FIGURE 14      **SAY-SAY CORRESPONDENCE FOR GOAL POSSESSING 6TH HIGHEST  
QUANTITATIVE VALUE**

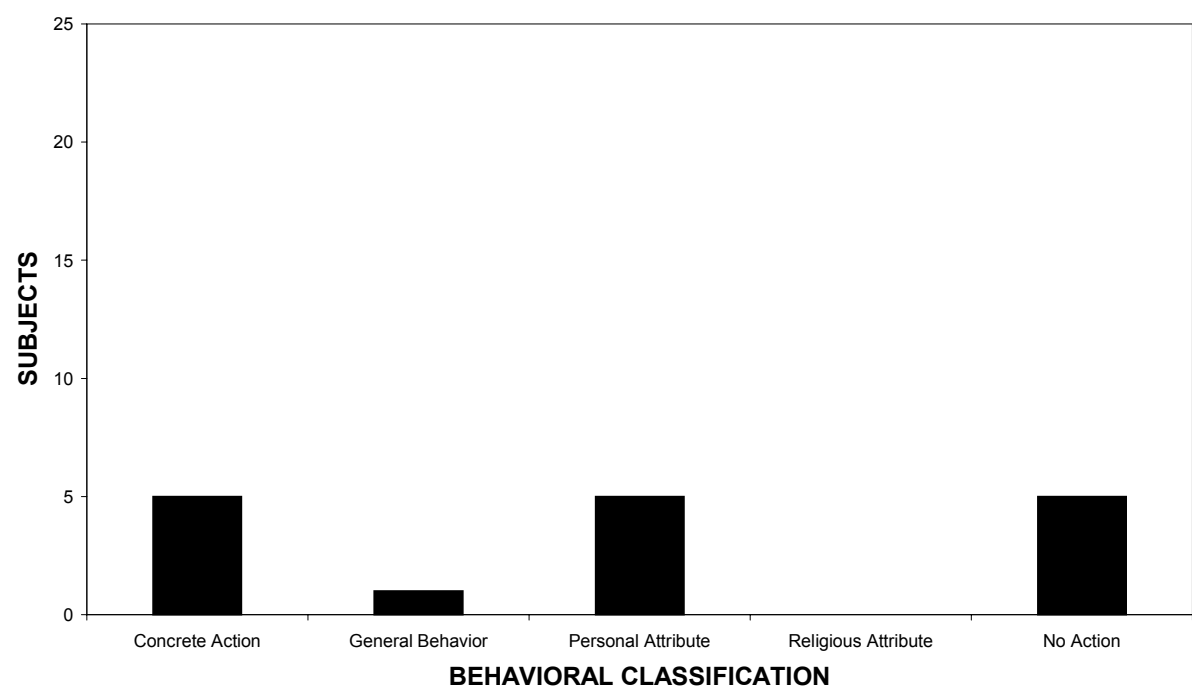


FIGURE 15      **SAY-SAY CORRESPONDENCE FOR GOAL POSSESSING LOWEST  
QUANTITATIVE VALUE**

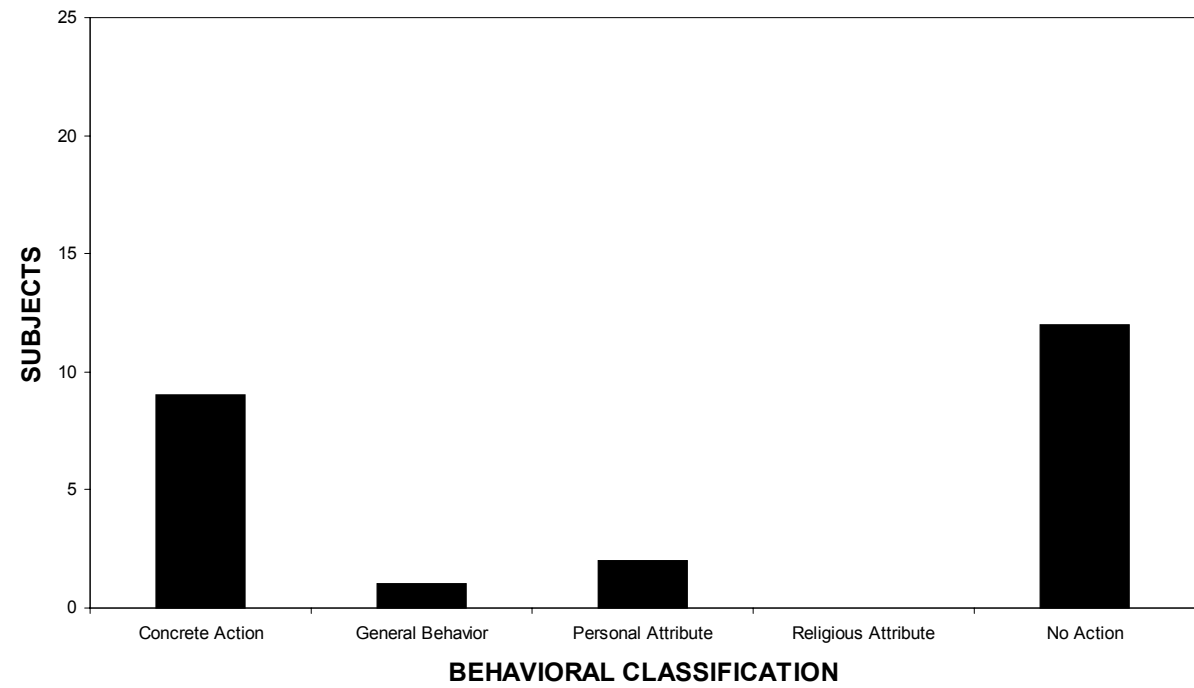


FIGURE 16

**SAMPLE DESCRIPTIONS OF CONCRETE ACTIONS**

Question: What are you doing to pass your exams?

Answer: Studying and taking notes in class

Question: What are you doing to be good at sports?

Answer: Practicing everyday and watching and learning from other people

Question: What are you doing to get a job?

Answer: Go out and get applications to fill out

Question: What are you doing to have the latest designer clothes?

Answer: Buying them

Question: What are you doing to have fun?

Answer: Going with friends and having fun

Question: What are you doing to make or keep friends?

Answer: I go out and party to meet new people and then get their digits so I can stay in contact.

Question: What are you doing to have a lot of power?

Answer: I tell people what to do

Question: What are you doing to have plenty of money?

Answer: Asking my parents for it

Question: What are you doing to play in the top sports team in state or country?

Answer: I play club volleyball. I try my best at games and parties.

Question: What are you doing to be known for something?

Answer: Playing softball and practicing everyday to be known as someone who took her team to state.

## **Appendix A: Recruitment Letter & Informed Consent Letter**

## **YOUTH SUBJECTS NEEDED FOR GOAL SETTING RESEARCH**

My name is Derek Lucky, I am a third year graduate student in the Department of Behavior Analysis at the University of North Texas. I am recruiting subject (ages 13-18) for participation in research required for my Master's thesis.

The purpose of my research is to assess the importance of goal setting in youth. I will pay each subject \$10 for full participation in this study.

Full participation entails answering three questionnaires. Questionnaire #1 will be administered on day one of the study. This initial questionnaire should not take more than thirty-minutes to complete. Three dollars will be paid to you or your child following completion of questionnaire #1. I will need at least one-week following completion of questionnaire #1 to prepare questionnaires #2 and #3. Questionnaires #2 and #3 will be administered together on a separate day. Questionnaire #2 and #3 should not take more than 90-minutes to complete. Seven dollars will be paid to you or your child following completion of questionnaires #2 and #3.

You may read over the prepared questionnaire(s) prior to your child's participating in this study; however, your child must not review the questionnaires prior to the set times that he or she is to begin answering the questionnaires.

The objective of this study beyond that it will assess the importance of goal setting in youth cannot be disclosed until the study is complete. However, for those parents or guardians interested, I will provide a summary of my completed thesis.

If you are interested in having your child participate in this study, please read the enclosed informed consent form, which describes among others, requirements for full participation, risks for participation, and confidentiality matters. If you decide to have your son or daughter participate in this study, please sign the consent form.

If you have any questions, please contact me at 940-484-6105.

Thank you for your time.

Derek Lucky

## Parental Consent Form

I grant permission for \_\_\_\_\_ to participate in a study that will improve the understanding of goal setting in youth.

I understand that my child's participation in the first phase of the study should not exceed thirty consecutive minutes on day one and ninety consecutive minutes on a separate day. I also understand that phase one and phase two will be separated by at least one week.

I understand that my child's full participation in this study requires his or her completing phases one and two. I also understand that my child will be expected to follow all instructions provided by the test administrator and all instructions printed on the questionnaires.

I understand that all information ascertained from this study will be coded with my child's initials. I also understand that all information made public will be coded using an arbitrarily determined code number. In addition, I agree that information obtained from this study may be used for publication or educational purposes.

I understand that there is no physical, psychological or social risks involved in my child's participation in this study and that I may withdrawal consent and discontinue participation at any time during this study without penalty.

I understand that upon request, I will be provided a summary of Derek's completed thesis.

I do grant permission for my child, \_\_\_\_\_ to participate in this project.

-----  
Parent/Guardian's signature

This project has been approved by Dr. Jesus Rosales and Dr. Joel Greenspoon:  
professors in the Department of Behavior Analysis at the University of North Texas.

**Appendix B: Instruction Sheet for Importance of Goals Scale & Importance of  
Goals Scale**



## Instructions for Questionnaire #1

Thank you for participating in this study. You have two tasks. The first is to identify which, if any, of the 42 goals listed on the questionnaire are goals you would like to achieve. If any of these goals are goals you would like to achieve, please circle the word “yes” next to each goal you would like to achieve.

Your second task is to, **within each category**, rank in terms of importance the goals you have already stated are goals you would like to achieve. For example, if within the **Educational Goal Category** a girl identified *to be a good student*, *to pass my exams*, and *to get better marks than my friends* as goals she would like to achieve, she would rank these three goals in terms of importance.

If she considers *being a good student* a more important goal than *getting better marks than my friends* and *passing my exams*, she would circle the #1 next to *being a good student*. Circling #1 means that *being a good student* is the most important goal for her in the Educational Goal Category. If *passing my exams* is a more important goal to her than *getting better marks than my friends*, she would circle #2 next to *passing my exams*. Because she considers *getting better marks than my friends* less important than *being a good student* and *passing my exams*, she would circle the #3 next to getting *better marks than my friends*.

Do not rank goals within a category that does not contain goals you would like to achieve.

\*Please remember that you are to only rank goals that fall within the same category. Do not rank goals from one category against goals from other categories. For example, do not rank Educational and Career goals together.

\* Please print your name. I cannot use your questionnaire unless I know who you are.

## QUESTIONNAIRE #1

<b>Reputation Goals</b>	<b>Is this a goal</b>	<b>RANK</b>
To be a member of the "in" group	yes no	12345
To be known for something	yes no	12345
To be part of a group	yes no	12345
To be the leader of a group	yes no	12345
To keep my reputation	yes no	12345
<b>Educational Goals</b>		
To get things do on time	yes no	1234567
To be a good student	yes no	1234567
To learn new things at school	yes no	1234567
To pass my exams	yes no	1234567
To get high grades in every subject	yes no	1234567
To get better marks than my friends	yes no	1234567
<b>Physical Goals</b>		
To be a member of a sports team	yes no	1234
To be good at sports	yes no	1234
To play in the top sports team in state or country	yes no	1234
To be better than others at sports	yes no	1234
<b>Career Goals</b>		
To get an apprenticeship-trade	yes no	12
To get a job	yes no	12
<b>Interpersonal Goals</b>		
To be loyal to others	yes no	1234567

To be fair to others	yes no	1234567
To help others	yes no	1234567
To be truthful and honest	yes no	1234567
To be dependable and responsible	yes no	1234567
To have others trust in me	yes no	1234567
To make or keep friends	yes no	1234567

### **Freedom-Autonomy Goals**

To be able to do whatever I want	yes no	1234567
To get my own way	yes no	1234567
To buy whatever I want	yes no	1234567
To have plenty of money	yes no	1234567
To have fun	yes no	1234567
To be able to get by on my own	yes no	1234567
To have the latest designer clothes	yes no	1234567

### **Self-Presentation Goals**

To be considered a hero	yes no	123456
To be considered tough by others	yes no	123456
To have a lot of power	yes no	123456
To always be right	yes no	123456
To be felt sorry for by others	yes no	123456
To be the center of attention	yes no	123456

## **Appendix C: Pair and Comparison Survey & Say-Say Correspondence Survey**

**For each pair of goals, circle or mark an X through the goal you would most like to achieve**

To be know for something  
To get high grades in every subject

To be know for something  
To be good at sports

To be know for something  
To get a job

To be know for something  
To make or keep friends

To be know for something  
To be able to do whatever I want

To be know for something  
To be considered a hero

To get high grades in every subject  
To be know for something

To get high grades in every subject  
To be good at sports

To get high grades in every subject  
To get a job

To get high grades in every subject  
To make or keep friends

To get high grades in every subject  
To be able to do whatever I want

To get high grades in every subject  
To be considered a hero

To be good at sports  
To be know for something

To be good at sports  
To get high grades in every subject

To be good at sports  
To get a job

To be good at sports  
To make or keep friends

To be good at sports  
To be able to do whatever I want

To be good at sports  
To be considered a hero

To get a job  
To be known for something

To get a job  
To get high grades to do course work at the university

To get a job  
To be good at sports

To get a job  
To make or keep friends

To get a job  
To be able to do whatever I want

To get a job  
To be considered a hero

To make or keep friends  
To be known for something

To make or keep friends  
To get high grades in every subject

To make or keep friends  
To be good at sports

To make or keep friends  
To get a job

To make or keep friends  
To be able to do whatever I want

To make or keep friends  
To be considered a hero

To be able to do whatever I want  
To be know for something

To be able to do whatever I want  
To get high grades in every subject

To be able to do whatever I want  
To be considered a hero

To be able to do whatever I want  
To be good at sports

To be able to do whatever I want  
To get a job

To be able to do whatever I want  
To make or keep friends

To be considered a hero  
To get high grades in every subject

To be considered a hero  
To be good at sports

To be considered a hero  
To get a job

To be considered a hero  
To make or keep friends

To be considered a hero  
To be know for something

To be considered a hero  
To be able to do whatever I want

**In the spaces provided, describe what, if anything, you are doing to achieve the following goals**

What are you doing to **be known for something**?

What are you doing to **get high grades in every subject**?

What are you doing to **be good at sports**?

What are you doing to **get a job**?

What are you doing to **make or keep friends**?

What are you doing to **be able to do whatever you want**?



What are you doing to **be considered a hero**?

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